

AMENDMENTS TO THE CLAIMS

Claims 1-8 (Cancelled)

9. (Original) In a distributed file system that stores encrypted files across multiple computers, a method comprising:

- modifying one or more of the encrypted files;
- computing a hash value of each modified encrypted file;
- collecting the hash values into a group;
- computing a hash value of the group; and
- digitally signing the hash value of the group of hash values.

10. (Original) A method as recited in claim 9, wherein the modified encrypted file includes a metadata stream containing a header and an indexing structure, the indexing structure including hashes of the files and a structure to access the hashes of the files, the computing a hash value of each modified encrypted file further comprising deriving a hash of the header and at least part of the structure.

11. (Original) A method as recited in claim 9, wherein the modified encrypted file includes a metadata stream containing a header, per user information, and an indexing tree, the indexing tree including hashes of the files, branch nodes to access the hashes, and a root node, the computing a hash value of each modified encrypted file further comprising hashing as a single composite the header, the per user information, and the root node.

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2 12. (Original) A data structure, embodied on a computer-readable
3 medium, produced by the method of claim 9.
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5 13. (Original) One or more computer readable media comprising
6 computer-executable instructions that, when executed, perform the method as
7 recited in claim 9.
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9 14. (Original) One or more computer readable media comprising
10 computer-executable instructions that, when executed, direct a computing device
11 to:

12 modify individual files stored in a serverless distributed file system;

13 compute a hash value of each modified file;

14 collect the hash values into a group; and

15 digitally signing the group of hash values.
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17 15. (Original) One or more computer readable media as recited in claim
18 14, wherein the modified file includes a metadata stream containing a header and
19 an indexing structure, the indexing structure including hashes of the files and a
20 structure to access the hashes of the files, the media further comprising computer-
21 executable instructions that, when executed, direct a computing device to derive a
22 hash of the header and at least part of the structure.
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24 16. (Original) One or more computer readable media as recited in claim
25 14, wherein the modified file includes a metadata stream containing a header, per

1 user information, and an indexing tree, the indexing tree including hashes of the
2 files, branch nodes to access the hashes, and a root node, the media further
3 comprising computer-executable instructions that, when executed, direct a
4 computing device to hash as a single composite the header, the per user
5 information, and the root node.

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7 17. (Currently amended) One or more computer readable media
8 comprising computer-executable instructions that, when executed, direct one or
9 more computing devices to store a [[A]] data structure stored on a computer-
10 readable medium comprising:

11 representations of modifications made to multiple files stored in a
12 distributed file system; and

13 a digital signature covering at least part of the representations to indicate
14 that the modifications were made by a user with the signature.

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16 18. (Currently amended) One or more computer readable media ~~A data~~
17 ~~structure~~ as recited in claim 17, wherein the representations comprise hashes of
18 data in each file that is affected by the modifications.

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20 19. (New) A method comprising:
21 storing representations of modifications made to multiple files stored in a
22 distributed file system; and
23 storing a digital signature covering at least part of the representations to
24 indicate that the modifications were made by a user with the signature.
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1 20. (New) A method recited in claim 19, wherein the representations
2 comprise hashes of data in each file that is affected by the modifications.
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